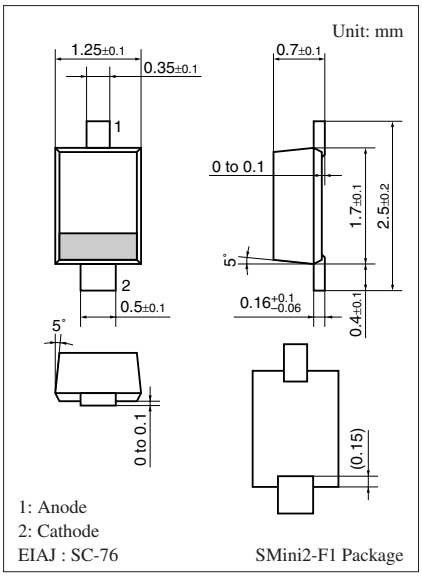
MA2ZD18

Silicon epitaxial planar type

For super high speed switching

■ Features

- Low forward voltage V_F



Marking Symbol: 2P

■ Absolute Maximum Ratings $T_a = 25°C$

Parameter	Symbol	Rating	Unit
Reverse voltage	V_R	20	V
Repetitive peak reverse voltage	V_{RRM}	25	V
Forward current (Average) *1	$I_{F(AV)}$	500	mA
Non-repetitive peak forward surge current *2	I_{FSM}	2	A
Junction temperature	T_j	125	°C
Storage temperature	T_{stg}	−55 to +125	°C

Note) ∗1: Mounted on an alumina PC board

∗2: The peak-to-peak value in one cycle of 50 Hz sine wave (non-repetitive)

■ Electrical Characteristics $T_a = 25°C \pm 3°C$

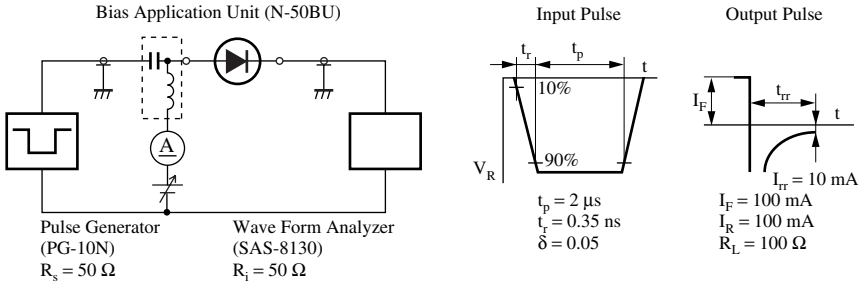
Parameter	Symbol	Conditions	Min	Typ	Max	Unit
Forward voltage	V_F	I_F = 500 mA			0.42	V
Reverse current	I_R	V_R = 20 V			200	µA
Terminal capacitance	C_t	V_R = 0 V, f = 1 MHz		100		pF
Reverse recovery time *	t_{rr}	$I_F = I_R$ = 100 mA I_{rr} = 10 mA, R_L = 100 Ω		7		ns

Note) 1. Measuring methods are based on JAPANESE INDUSTRIAL STANDARD JIS C 7031 measuring methods for diodes.

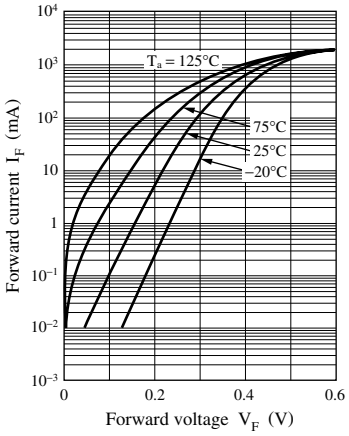
2. This product is sensitive to electric shock (static electricity, etc.). Due attention must be paid on the charge of a human body and the leakage of current from the operating equipment.

3. Absolute frequency of input and output is 250 MHz.

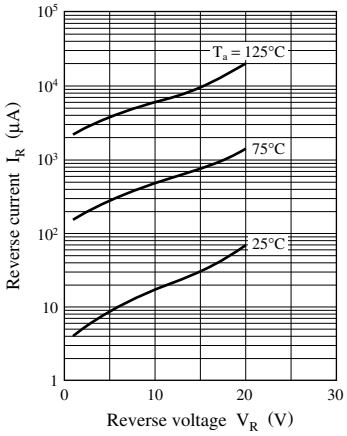
4. *: t_{rr} measurement circuit



I_F — V_F


10^4
10^3
10^2
10
1
10^{-1}
10^{-2}
10^{-3}
Forward current I_F (mA)
T_a = 125°C
75°C
25°C
−20°C
0
0.2
0.4
0.6
Forward voltage V_F (V)

I_R — V_R


10^5
10^4
10^3
10^2
10
1
Reverse current I_R (μA)
T_a = 125°C
75°C
25°C
0
10
20
30
Reverse voltage V_R (V)

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